Medical
Wahs
Copy 2

CONTENTS OF VOLUME 173

No. 1, March, 1948

PAGE

Fales, Frank W., and Baumberger, J. Percy. The anaerobic assimilation of glucose by yeast cells 1

Balls, A. K., Walden, M. K., and Thompson, R. R. A crystalline β-amylase from sweet potatoes 9

Klotz, Irving M., and Urquhart, Jean M. The combination of adenine, adenosine, and adenylic acid with serum albumin 21

Rosenthal, T. B. The effect of temperature on the pH of blood and plasma *in vitro* 25

Hunter, Andrew, and Downs, Clarence E. Inactivation of arginase by protein denaturants 31

Neuman, W. F., Fleming, R. W., Carlson, A. B., and Glover, N. The fluorophotometric determination of uranium in biological material 41

Tarver, Harold, and Morse, Lura M. The release of the sulfur from the tissues of rats fed labeled methionine 53

Lieberman, S. V. Simplified calculations of theoretical distributions and partition coefficients for counter-current extractions 63

Sonne, John C., Buchanan, John M., and Delluva, Adelaide M. Biological precursors of uric acid. I. The rôle of lactate, acetate, and formate in the synthesis of the ureide groups of uric acid 69

Buchanan, John M., Sonne, John C., and Delluva, Adelaide M. Biological precursors of uric acid. II. The rôle of lactate, glycine, and carbon dioxide as precursors of the carbon chain and nitrogen atom 7 of uric acid 81

Brown, Kenneth D., Shupe, Robert E., and Laskowski, M. Crystalline activated protein B (chymotrypsin B) 99

Fruton, Joseph S. Specificity of chymotrypsin B 109

Hoberman, Henry D., Sims, Ethan A. H., and Engstrom, William W. The effect of methyltestosterone on the rate of synthesis of creatine 111

Robblee, A. R., Nichol, C. A., Cravens, W. W., Elvehjem, C. A., and Halpin, J. G. Some properties of an unidentified chick growth factor found in condensed fish solubles 117

Daniel, Louise J., Scott, M. L., Norris, L. C., and Heuser, G. F. The effect of synthetic pterins on growth and hemoglobin formation in the chick 123

Camien, Merrill N., and Dunn, Max S. A composite basal medium for the microbiological assay of leucine 137

Wilber, Charles G. Glucose content of the body fluid in marine annelids 141

Wainio, W. W., Cooperstein, S. J., Kollen, S., and Eichel, B. The preparation of a soluble cytochrome oxidase 145

Stekol, Jakob A. A new synthesis of S-(β-amino-β-carboxyethyl)homocysteine (cystathionine) and S-bis(γ-amino-γ-carboxypropyl)sulfide (homolanthionine) 153

Dounce, Alexander L., and Beyer, G. Thannhauser. A new method for the determination of the enzyme aldolase 159

Pearlman, W. H., Rakoff, A. E., Paschkis, K. E., Cantarow, A., and Walkling, A. A. The metabolic fate of estrone in bile fistula dogs 175

Sarett, Lewis Hastings. Partial synthesis of etiocholene-9-ol-3(α)-one-17 ... 185

PAGE

WINNICK, THEODORE, FRIEDBERG, FELIX, and GREENBERG, DAVID M. Studies in protein metabolism with compounds labeled with radioactive carbon. I. Metabolism of DL-tyrosine in the normal and tumor-bearing rat 189

GREENBERG, DAVID M., and WINNICK, THEODORE. Studies in protein metabolism with compounds labeled with radioactive carbon. II. The metabolism of glycine in the rat 199

TOLBERT, B. M. The preparation of sodium acetate labeled with radioactive carbon in the methyl group 205

OSTWALD, ROSEMARIE. Synthesis of chloroacetic acid and glycine labeled with radioactive carbon in the carboxyl group 207

BAER, HAROLD. The inhibition of pyruvic oxidase by protoanemonin 211

KAZENKO, ANNA, and LASKOWSKI, M. On the specificity of chicken pancreas conjugase (γ-glutamic acid carboxypeptidase) 217

NOVIKOFF, ALEX B., and POTTER, VAN R. Biochemical studies on regenerating liver 223

NOVIKOFF, ALEX B., and POTTER, VAN R. Changes in nucleic acid concentration during the development of the chick embryo 233

NOVIKOFF, ALEX B., POTTER, VAN R., and LEPAGE, G. A. Phosphorylating glycolysis in the early chick embryo 239

CHARGAFF, ERWIN. Studies on the mechanism of the thromboplastic effect 253

CHARGAFF, ERWIN, and GREEN, CHARLOTTE. On the inhibition of the thromboplastic effect 263

MCKENZIE, BERNARD F., MATTOX, VERNON R., ENGEL, LEWIS L., and KENDALL, EDWARD C. Steroids derived from bile acids. VI. An improved synthesis of methyl 3,9-epoxy-Δ^{11}-cholenate from desoxycholic acid 271

MATTOX, VERNON R., TURNER, RICHARD B., MCKENZIE, BERNARD F., ENGEL, LEWIS L., and KENDALL, EDWARD C. Steroids derived from bile acids. VII. The probable stereochemical configuration of some derivatives of the bile acids 283

HANDLER, PHILIP. The influence of thyroid activity on the liver and plasma lipides of choline- and cystine-deficient rats 295

POPE, ALFRED, and ANFINSEN, CHRISTIAN B. Histochemical distribution of peptidase activity in the central nervous system of the rat 305

CLARK, DALE A., and DITTMER, KARL. The inhibition of microbial growth by β-2-furylalanine 313

DITTMER, KARL, HERZ, WERNER, and CRISTOL, STANLEY J. The synthesis and microbiological properties of two isomeric naphthylalanines 323

CHARGAFF, ERWIN, and ZAMENHOF, STEPHEN. The isolation of highly polymerized desoxypentosenucleic acid from yeast cells 327

PRICE, VINCENT E., and GREENSTEIN, JESSE P. N-Acylated and N-methylated glycyldehydroalanine 337

PRICE, J. M., MILLER, E. C., and MILLER, J. A. The intracellular distribution of protein, nucleic acids, riboflavin, and protein-bound aminoazo dye in the livers of rats fed *p*-dimethylaminoazobenzene 345

FRIEDBERG, FELIX, TARVER, HAROLD, and GREENBERG, DAVID M. The distribution pattern of sulfur-labeled methionine in the protein and the free amino acid fraction of tissues after intravenous administration 355

KOCH, WALTER, and KAPLAN, DEBORAH. A simultaneous Carr-Price reaction for the determination of vitamin A 363

SKIPPER, HOWARD E., BRYAN, CARL E., WHITE, LOCKE, JR., and HUTCHISON, OLIVIA S. Techniques for *in vivo* tracer studies with radioactive carbon 371

PAGE

STÄLLBERG-STENHAGEN, STINA, and STENHAGEN, EINAR. Synthesis and x-ray investigation of methyl-substituted long chain hydrocarbons related to phthiocerane 383
BINKLEY, FRANCIS. A colorimetric reaction of chloride ion 403
NAKAMURA, KAY, and BINKLEY, FRANCIS. Colorimetric estimation of cysteine .. 407
BINKLEY, FRANCIS, and NAKAMURA, KAY. Metabolism of glutathione. I. Hydrolysis by tissues of the rat 411

Letters to the Editors

BORSOOK, HENRY, DEASY, CLARA L., HAAGEN-SMIT, A. J., KEIGHLEY, GEOFFREY, and LOWY, PETER H. α-Aminoadipic acid: a product of lysine metabolism .. 423
DUBNOFF, JACOB W., and BORSOOK, HENRY. α-Aminoadipic acid in arginine formation 425
PILLEMER, LOUIS, and MOORE, DAN H. The spontaneous conversion of crystalline tetanal toxin to a flocculating atoxic dimer 427
ABRAMS, RICHARD, HAMMARSTEN, EINAR, and SHEMIN, DAVID. Glycine as a precursor of purines in yeast 429
COPPEDGE, RICHARD L., SEGALOFF, ALBERT, SARETT, HERBERT P., and ALTSCHUL, AARON M. Cozymase as a part of the hepatic estrogen-inactivating system. 431
SWEAT, MAX L., and SAMUELS, LEO T. Diphosphopyridine nucleotide as an essential factor in the metabolism of testosterone by the liver 433
BROQUIST, HARRY P., and SNELL, ESMOND E. On the interaction of avidin and oleic acid 435
FRIEDBERG, FELIX, SCHULMAN, MARTIN P., and GREENBERG, DAVID M. The effect of growth on the incorporation of glycine labeled with radioactive carbon into the protein of liver homogenates 437

No. 2, APRIL, 1948

ROSENKRANTZ, HARRIS. Infra-red absorption spectra of tocopherols and related structures 439
FISHMAN, WILLIAM H., SPRINGER, B., and BRUNETTI, R. Application of an improved glucuronidase assay method to the study of human blood β-glucuronidase 449
FRUTON, JOSEPH S., SMITH, VIRGINIA A., and DRISCOLL, P. ELIZABETH. On the proteolytic enzymes of animal tissues. VII. A peptidase of calf thymus 457
DEKKER, CHARLES A., and FRUTON, JOSEPH S. Preparation of D- and L-methionine from DL-methionine by enzymatic resolution 471
KREHL, WILLARD A., and FRUTON, JOSEPH S. The utilization of peptides by lactic acid bacteria 479
KETY, SEYMOUR S., HARMEL, MEREL H., BROOMELL, HANNAH T., and RHODE, CLARA BELLE. The solubility of nitrous oxide in blood and brain 487
KRUEGER, KEATHA K., and PETERSON, W. H. Microbiological evidence for the identity of α- and β-biotin 497
TEERI, ARTHUR E. Thiamine and the cyanogen bromide reaction 503
ROE, JOSEPH H., and RICE, EUGENE W. A photometric method for the determination of free pentoses in animal tissues 507
HUNDLEY, JAMES M., and BOND, HOWARD W. A study of the conversion of isotopic nicotinic acid to N^1-methylnicotinamide 513

PAGE

RACKER, E., and KRIMSKY, I. Inhibition of coupled phosphorylation in brain homogenates by ferrous sulfate 519

MEINKE, W. W., and HOLLAND, BRYANT R. Threonine-serine antagonism in some lactic acid bacteria 535

EHRLICH, GABRIELE, TAYLOR, HARRIETT E., and WAELSCH, HEINRICH. The effect of surface-active substances on the fuchsin reaction of higher fatty aldehydes 547

SMITH, EMIL L. The peptidases of skeletal, heart, and uterine muscle 553

SMITH, EMIL L. The glycylglycine dipeptidases of skeletal muscle and human uterus 571

TINKER, JOHN F., and BROWN, GEORGE BOSWORTH. The characterization of purines and pyrimidines by the method of counter-current distribution 585

TAYLOR, JOHN FULLER, GREEN, ARDA ALDEN, and CORI, GERTY T. Crystalline aldolase 591

CORI, GERTY T., SLEIN, MILTON W., and CORI, CARL F. Crystalline D-glyceraldehyde-3-phosphate dehydrogenase from rabbit muscle 605

TAYLOR, JOHN FULLER, VELICK, SIDNEY F., CORI, GERTY T., CORI, CARL F., and SLEIN, MILTON W. The prosthetic group of crystalline D-glyceraldehyde-3-phosphate dehydrogenase 619

VELICK, SIDNEY F., and RONZONI, ETHEL. The amino acid composition of aldolase and D-glyceraldehyde phosphate dehydrogenase 627

VENKATARAMAN, ALAMELA, VENKATARAMAN, POONAMALLE R., and LEWIS, HOWARD B. The metabolism of *p*-aminosalicylic acid in the organism of the rabbit 641

MCCONNELL, KENNETH P. Passage of selenium through the mammary glands of the white rat and the distribution of selenium in the milk proteins after subcutaneous injection of sodium selenate 653

SPECTOR, HARRY. The metabolic interrelationship between tryptophan, pyridoxine, and nicotinic acid; forced feeding studies in rats. Plate 1 659

LOWRY, OLIVER H. A micro photofluorometer 677

JAGER, B. V., and NICKERSON, MARGARET. A simple quantitative chemical method for estimating γ-globulin in human serum 683

VAN WAGTENDONK, WILLEM J. The action of enzymes on paramecin 691

FAIRBAIRN, DONALD. The preparation and properties of a lysophospholipase from *Penicillium notatum* 705

BARKER, S. B. Determination of protein-bound iodine 715

SHAPIRO, B., and WERTHEIMER, E. The synthesis of fatty acids in adipose tissue *in vitro* 725

GROSSOWICZ, N. Glutamine, an antimetabolite for *Staphylococcus aureus* 729

NEUMAN, W. F., FLEMING, R. W., DOUNCE, ALEXANDER L., CARLSON, A. B., O'LEARY, J., and MULRYAN, B. The distribution and excretion of injected uranium 737

ARMSTRONG, MARVIN D., and DU VIGNEAUD, VINCENT. Mercaptals and mercaptoles of cysteine 749

LEHNINGER, ALBERT L., and KENNEDY, EUGENE P. The requirements of the fatty acid oxidase complex of rat liver 753

LEHNINGER, ALBERT L., and SMITH, SYLVIA WAGNER. Rapid determination of *n*-octanoic acid 773

PUTMAN, E. W., HASSID, W. Z., KROTKOV, G., and BARKER, H. A. Preparation of radioactive carbon-labeled sugars by photosynthesis 785

Letters to the Editors

PAGE

LONDON, IRVING M., SHEMIN, DAVID, and RITTENBERG, D. The *in vitro* synthesis of heme in the human red blood cell of sickle cell anemia 797

SHEMIN, DAVID, LONDON, IRVING M., and RITTENBERG, D. The *in vitro* synthesis of heme from glycine by the nucleated red blood cell 799

MCNUTT, WALTER S., and SNELL, ESMOND E. Phosphates of pyridoxal and pyridoxamine as growth factors for lactic acid bacteria 801

BARKER, H. A., VOLCANI, B. E., and CARDON, B. P. Tracer experiments on the mechanism of glycine fermentation by *Diplococcus glycinophilus* 803

MCELROY, O. E., and DORFMAN, ALBERT. The rôle of pantothenic acid in the metabolism of pyruvate by *Proteus morganii* 805

LOOMIS, W. F., and LIPMANN, FRITZ. Reversible inhibition of the coupling between phosphorylation and oxidation 807

SHANKMAN, S. Glycine content of DL-alanine 809

BLOCH, KONRAD, and KRAMER, W. The effect of pyruvate and insulin on fatty acid synthesis *in vitro* 811

INDEX TO VOLUME 173 813